

Radiologic, Endoscopic and Functional Patterns in Patients with Symptomatic Gastroesophageal Reflux Disease after Roux-en-Y Gastric Bypass



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Introduction:

Roux-en-Y gastric Bypass (RYGB):

- gold standard in treatment of morbid obesity and Gastroesophageal Reflux Disease (GERD)
- Resolution of GERD-Symptoms around 85-90%.
- So far, data on evaluation for persistent GERD after RYGB is scarce

Methods:

- All patients evaluated for persistent GERD after RYGB 01/12 – 12/16
- assessed with questionnaires, endoscopy, 24h-pH-impedance-manometry, barium swallows, (MR-Enteroclysis or thoracoabdominal CT)
- All values are medians with minimum and maximum in parentheses

Results:

- 47 patients, 27 (57.4%) female. Median age was 36.5 years (min 19.1-max 67.2), interval between initial RYGB and evaluation 3.8y (0.6-12.6)
- BMI@RYGB was 46.3kg/m² (35.4-65), BMI@evaluation 30.3 kg/m² (20.3-47.2), total weight loss 34.4% (14.2-56.7) , excessive BMI Loss 74.6% (27-123)

Symptoms:

- typical GERD 44 (94%)
- obstructive 18 (38%)
- respiratory 8 (17%)
- pain 21 (45%)

Endoscopic evaluation:

- Esophagitis (LA grade)
 - A 44 (94%)
 - B 8 (17%)
 - C 2 (4%)
 - D 3 (6%)
 - Barrett 7 (15%)
- Marginal ulcers 4 (9%)

Radiological evaluation:

- Pouch-gastric fistula 2 (4%)
- Large pouch (>6cm width) 5 (11%)
- Hiatal hernia
 - <2cm 6 (13%), 2-5cm 11 (23%), >5cm 5 (11%), PEH 3 (6%)

Functional evaluation:

- **24h-pH-impedance-metry (n=44)**
 - Abnormal acid exposure (>4% pH<4) 27 (61%)
 - >40 reflux episodes 30 (68%)
 - positive symptom association 24 (55%), functional symptoms 8 (18%)
- **High resolution manometry (n=45)**
 - Hypotensive LES 26 (58%), aperistalsis 8 (18%), ineffective motility 9 (20%)

Conclusion:

- evaluation for persistent GERD after RYGB revealed a high percentage of hiatal herniae, hypotensive LES and other severe esophageal motility disorders